

KD-202D-3 Examination lamp

USER MANUAL

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I . Brief introduction

Model: KD-202D-3 (AC) KD-202D-3 (AC/DC)

Scope of application: The examination lamp can also be classified as mini type operation light, mostly used in outpatient visits and the auxiliary lighting for minor operation. It is suitable for the frequently moved occasion which demands relatively lower for the lighting intensity.

Characteristic: The lamp uses the long-life and low-energy LED light source which has the characteristics of elegant appearance, simple operation, easy installation, safety with low voltage, hard to be damaged.

Product component: lamp holder, lamp stent, lamp base and power line etc.

II. Performance Summarize

It is designed with the system of low voltage output cold lighting, wide voltage power supply which can adapt to the voltage of the countries all over the world.

The design and production of this light source strictly executes the first part of the safety requirements of medical electrical equipment GB4793.1-2007: general requirements which is guaranteed in safety.

III Main technical parameters

Input voltage: 90V~240V 50Hz-60Hz

Color temperature: 6000K $\pm$ 500K

Center Luminance: 20000lx (operating distance of 700mm)

Spot diameter: 70~100mm

Bulb power: 3W $\times$ 12

Input power: $\leq$ 40W

Light-dimmer: 0~max

DC power supply time: 7h

DC charging time: 6h

Fuse protector: F3A-250V

IV Security tips and symbol instructions

When the check lamp is in use, you should always abide by the basic safety precautions in order to avoid fire, electric shock or the risk of injury,.

(1) Please read the instructions carefully, and operating according to the specifications and requirements.

(2) Before cleaning the light, please unplugged the power cord and close the total power supply.

(3)The maintenance, installation, commission of the light should be operated by professional personnel.

(4) The introduction of the following symbols



Attention! Check the random documents



Protect the grounding



Disconnect the power



Connect the pow

V Working Environment

A. Environmental temperature: -10 $^{\circ}$ C~+40 $^{\circ}$ C

B. Relative humidity: $\leq$ 75%

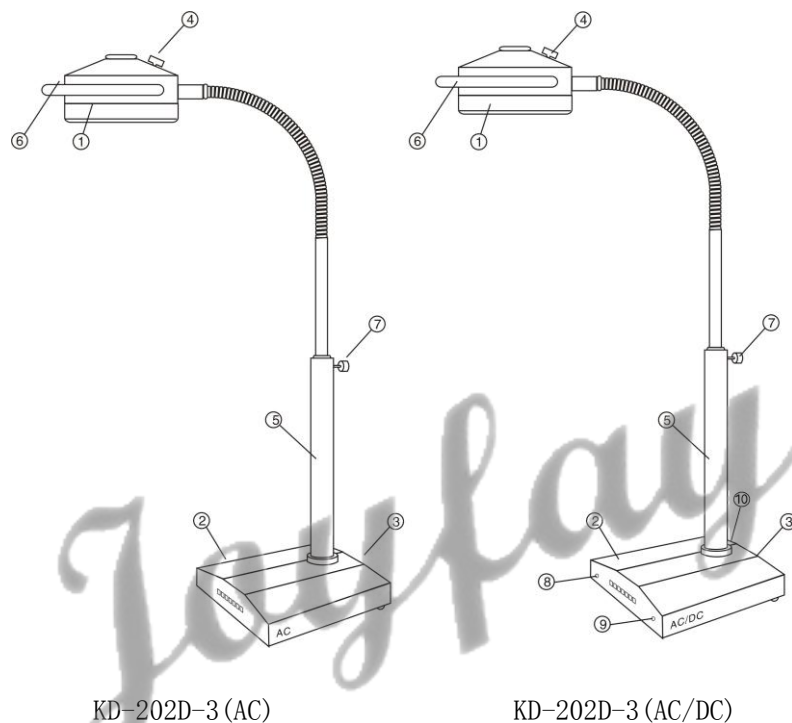
C. The atmosphere: 86.0~106.0kPa

VI Product list

- 1.Lamp holder and hose
2. Lamp stent
3. Lamp base
4. Power line

VII. Product interface

- | | | |
|--------------------------------|---------------------------------|------------------|
| 1. Lamp holder | 2. Lamp base | 3. Power switch |
| 4. Brightness adjusting button | 5. Fulcrum bar | |
| 6. Knob | 7. Up and down adjusting button | |
| 8. AC indicator light | 9. DC indicator light | 10. Range switch |



VIII Installation instructions

Open the packing box, check whether there are missing parts or damage phenomenon of the products according to the product list. If there is any problem, please contact with the dealer or manufacturer in time to get solved properly.

Installation method:

- Disboard the bending type spiral pole in the bottom of the fulcrum

bar (5), insert it into the hole in the lamp stent (2) according to position of the positioning pin, lock the bending type spiral pole.

- Joint the connection tube of the lamp holder with the fulcrum bar (5) in accordance with the position of the positioning pin, and lock the screws firmly clockwise.

IX operating instructions

- Bending the hose to get the proper lighting angle you needed;
- Loosen adjusting button (7) in the lamp pole, adjust the lifting lever. When you get the appropriate lighting height, lock the adjusting button;
- Connect the power cord, open the power switch at the back of the lamp base, both the indicator light and the examination light will light up;
- Transfer the brightness adjusting knob (4), you can get the proper lighting intensity you needed;
- By using the knob, you can adjust the lighting angle of the lamp holder.
- When you want to use KD-202 D-3 (AC/DC) under DC condition, turn the selector switch, DC indicator light lights up and it works.

X Note

- When installation, please assembly and reinforce according to the instruction of the technical requirements.
- Do not use the lamp near water.
- Before cleaning the light, please unplugged the power cord and close the total power supply.
- Never put any item on the power line.
- Do not use liquid spray to clean the light.
- The maintenance, installation, commission of the light should be operated by professional personnel.

XI Failure Judgment and Eliminating Methods

(It should be operated by the professionals)

Fault phenomena	Fault cause	Solution
Turn on the power switch, the indicator light is not bright	Power lines have no electricity	Connect to the circuit where there is electricity supply
	The power cord is not connected well	Reconnect the power cord
	Fuse damage	Change the fuse
Turn on the power switch, the indicator light is bright but the lamp is not bright	Brightness adjusting button is not open	Re-install the bulb firmly
	Hose and fulcrum bar are not connected well	Reconnect the hose and fulcrum bar
	System line fault	Contact with the after-sale service department for solution
KD-202D-3 (AC/DC) DC indicator light is not bright	Range switch (10) is not clicked to the proper position	Click the range switch to the DC position
	The accumulator has no electricity	Recharge it in time
Other fault		Contact with the after-sale service department for solution
A bulb damage will influence the other 3 bulbs, please contact with the manufacturer, you will get the new bulb and bulb replacement manual. The replacement should be operated by professional or you can send it back to the manufacturer.		

XII After-sales service warranty

Warranty of 18 months, provide maintenance service all user's life.

◆In the warranty period, in normally using, the trouble because of the product quality, the consumer depends on the warranty slip and invoice enjoys free maintenance service.

◆The bulb of the lamp is LED and the normal life of LED bulb is about 50000 hours. Generally, you do not need to change them.

◆If the error caused by remodel or install other functions which is without our company's permission, is not within the scope of warranty.

◆If the model, number, release date is modified, deleted, moved or illegibility, will not enjoy the maintenance service.

◆The error caused by human factor such as falling, squeezing, dip in, wetting, etc. is not within the scope of warranty.

◆Once receiving the goods, please sign and accept it after opening the package to inspect and confirm whether the instrument is crushed, scratched or not. Make sure there is no special unnumbered inside. If the goods are damaged and you did not inspect before sign it, It will be at your own risk.

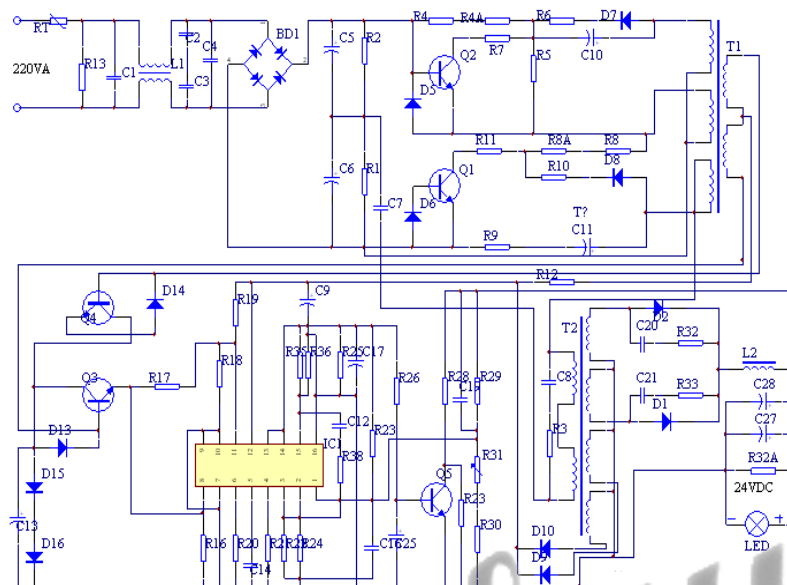
XIII Transportation and storage conditions

A. Environmental temperature: -40℃~55℃

B. Relative humidity: ≤70%

C. The atmosphere: 50Kpa~106Kpa

XIV Electrical schematic diagram and components list



N0.	Material name	Specificati on	Quant ity	Rem ark
1	Circuit board	7D1A	1	
2	Field-effect tube	SL20C20U	1	
3	Filter choke	220mH	1	
4	Inductance	470mH	1	
5	Capacitance	F103M/2KV	3	
6	Capacitance	22nj/T100V	1	
7	Capacitance	102M/2KV	1	
8	Electrolytic capacitor	50V/1uf	1	
9	Capacitance	222J/250V	1	

10	Capacitance	102J/100P	1	
11	Electrolytic capacitor	50V/4.7uf	3	
12	Electrolytic capacitor	50V/22uf	1	
13	Electrolytic capacitor	50V/47uf	1	
14	Electrolytic capacitor	50V/1000uf	2	
15	Electrolytic capacitor	250V/470uf	2	

16	Capacitance	22nj/T100V	1	
17	Capacitance	102M/2KV	1	
18	Electrolytic capacitor	50V/1uf	1	
19	Capacitance	222J/250V	1	
20	Capacitance	102J/100P	1	
21	Electrolytic capacitor	50V/4.7uf	3	
22	Electrolytic capacitor	50V/22uf	1	
23	Electrolytic capacitor	50V/47uf	1	
24	Electrolytic capacitor	50V/1000uf	2	
25	Electrolytic capacitor	250V/470uf	2	
26	CBB capacitor	400V/105J	1	
27	Filter capacitor	0.1uf	2	
28	Resistance	150K/0.25VA	1	
29	Resistance	15Ω /0.25VA	2	

30	Resistance	120K Ω /0.25VA	1	
31	Resistance	12K Ω /0.25VA	1	
32	Resistance	10K Ω /0.25VA	1	
33	Resistance	1K Ω /0.25VA	1	
34	Resistance	22K Ω /0.25VA	1	
35	Resistance	15K Ω /0.25VA	1	
36	Resistance	5.6K Ω /0.25VA	2	
37	Resistance	560 Ω /0.25VA	1	
38	Resistance	1.2K Ω /0.25VA	1	
39	Resistance	3.9K Ω /0.25VA	1	
40	Resistance	680K Ω /0.25VA	1	
41	Resistance	1.5K Ω /0.25VA	1	
42	Resistance	100K Ω /0.25VA	1	
43	Resistance	4.7K Ω /0.25VA	1	
44	Resistance	220 Ω /0.25VA	1	
45	Resistance	150K Ω /0.25VA	5	
46	Resistance	2 Ω /0.25VA	2	
47	Resistance	22K/0.25VA	2	
48	Resistance	24 Ω /0.25VA	2	
49	Resistance	3.9K/0.25VA	2	
50	Resistance	100 Ω /3VA	1	
51	Resistance	680 Ω /3VA	1	
52	Diode	F107	6	
53	Diode	IN4752	2	
54	Diode	IN4148	2	
55	Audion	1815	3	
56	Thermistor	5D-15	1	
57	Piezoresistor	10D471K	1	

58	Integrated circuit	LM494	1	
59	Rectifier bridge	KBU810	1	
60	Lamp	LED	54	
61	Power socket		1	
62	Power line		1	
63	Fuse block		2	
64	Power switch		1	
65	Accumulator	18AH,12V	1	

Any products may be updated or improved. The change of circuit or element specifications of the product will not with prior notice.

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Warranty card

Company name:			
Address			Phone No.
Product name		Model	
Serial Number		Manufacture date	
Sale date			
Fault description:			
Remark: The warranty of our products is 18 months since the release date.			

(Please truthfully fill in this form, cut it according to the dotted line and send it back to our company, thank you for your cooperation)

Maintenance card

Company name:			
Address			Phone No.
Product name		Model	
Serial Number		Manufacture date	
Sale date			
Fault description:			
Remark: You can enjoy seventy percent discount for the maintenance services even if you use this card over the quality assurance period.			